

Articles of Significant Interest Selected from This Issue by the Editors

A Novel Prevacuolar Compartment in Filamentous Fungi

Vacuoles of filamentous fungi are highly diverse in size and shape. Using confocal microscopy to visualize the vacuolar ATPase (a proton pump), Bowman et al. (p. [1253–1263](#)) observe novel ring-like structures, the size of nuclei, in a small region near the hyphal tip of *Neurospora crassa*. These organelles contain a subset of vacuolar proteins and appear to function as prevacuolar compartments (PVCs). The PVCs exhibit dynamic shape changes, forming tubular protrusions that subsequently separate from the ring-like structures. In size, protein composition, and dynamic behavior, the *N. crassa* PVCs appear to be significantly different from the well-studied prevacuolar compartments of yeast cells.

Candida dubliniensis Biofilms Are Different

Candida dubliniensis is closely related to *Candida albicans* and exhibits a similar but degenerating repertoire of developmental programs. Because a high proportion of *C. dubliniensis* strains (one-third) are homozygous at the mating type locus (*MTL*), Pujol et al. (p. [1186–1202](#)) compared the variability of white-opaque switching and biofilm formation between *MTL*-homozygous strains of the two species. While all tested traits of switching appear to be degenerating or lost in *C. dubliniensis*, select traits related to biofilm formation have been preserved or have changed, most notably a transition from a hypha- to a pseudohypha-dominated biofilm. The possibility is entertained that the latter reflects adaptation to a different host niche.